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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,375	06/09/2005	Yoko Hanada	262666US0PCT	4697
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			PALENIK, JEFFREY T	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			1615	
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			04/30/2009	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)			
	10/517,375	HANADA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Jeffrey T. Palenik	1615			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 17 No.  2a) This action is <b>FINAL</b> . 2b) This  3) Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) 2,4-8,10,12,14 and 1. 5) Claim(s) is/are allowed. 6) Claim(s) 1,3,9,11 and 13 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	<u>5</u> is/are withdrawn from considera	ation.			
9)☐ The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the conference are replacement drawing sheet(s) including the correct and the conference are replacemented.  11) The oath or declaration is objected to by the Expression and the conference are replacemented.	drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 10 Dec 2004 and 7 Dec 2006.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	te			

### **DETAILED ACTION**

### RESPONSE TO REMARKS

The Examiner thanks the Applicants for their timely reply filed on 16 April 2008, in the matter of 10/517,375, as well as Applicants' timely filed response filed on 17 November 2008 to the Examiner's Request for Information.

Applicants' election **with traverse** of Group III (claims 1, 3, 9, 11 and 13) is acknowledged. Applicants traverse the lack of unity requirement on the grounds that Yamashina et al. (USPN 5,077,041) neither discloses nor suggests a block copolymer comprising a block of amino-modified organopolysiloxane chain and a block of a polyalkylene chain as recited in the elected Group III.

Applicants' request for reconsideration of the restriction requirement has been fully considered by the Examiner and **is persuasive**. However, upon further consideration of the claims submitted by Applicants, a new requirement follows. Regardless, the claims still do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same corresponding technical feature. There is no special technical feature since Claim 1 of Ando et al. (JP 1997-151119) teaches the block copolymer comprising a block of amino-modified organopolysiloxane chain and a block of a polyalkylene chain as recited in the elected Group III.

Also, Applicant's elections of the following species with traverse are acknowledged:

**Organopolysiloxane Species**: compound known as "FZ-3789", "Silstyle 201" or "bisbutyloxyamodimethicone/PEG-60 copolymer"

Cationic Surfactant Species: stearyltrimethylammonium chloride

Lubricant Species: stearyl alcohol

The Examiner has reconsidered the aforementioned species elections and hereby withdraws the species requirement for the organopolysiloxane compound (A).

The remaining claims Group I (claim 6), Group II (claims 2, 7, 8, 10 and 12), and Group III (claims 4, 5, 14 and 15), are all withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to non-elected inventions and/or species, there being no allowable generic or linking claim. Applicants timely traversed the lack of unity requirement between the compositions.

The remaining claims 1, 3, 9, 11 and 13 are presented and represent all claims under consideration.

#### INFORMATION DISCLOSURE STATEMENT

Two Information Disclosure Statements (IDS), filed 10 December 2004 and 7 December 2006, are acknowledged and have been reviewed.

## CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 9, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over combined teachings of Kondo et al. (USPN 6,086,663) and Ando et al. (JP 1997-151119).

Independent claim 1 is directed to a hair cosmetic composition comprising components (A) and (B), wherein (A) is an amino-modified organopolysiloxane chain and a polyoxyalkylene chain, and (B) is at least one cationic surfactant having a core formula selected from the group consisting of formula (1) or (2):

$$\begin{bmatrix} R^{1} & R^{2} \\ R^{1} & N - R^{4} \end{bmatrix}^{+} X^{-}$$
 (1)  $R^{5} - N < \frac{R^{6}}{R^{6}}$  (2)

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Claims 3 and 9 further limit the composition of claim 1 such that component (A) is in the form of a block copolymer of the following core formula (4):

$$\begin{bmatrix}
R^{7} & R^{8} & R^{7} \\
Y - (SiO)_{a} - (SiO)_{b} - Si - Y - O(C_{n}H_{2n}O)_{c}
\end{bmatrix}_{d} (4)$$

 $R_7$  is recited as being a hydrogen or  $C_1$ - $C_6$  hydrocarbon group.  $R_8$  is recited as being the same as  $R_7$  or E, where E is a reactive functional group represented by  $-R_9Z$ -, where  $R_9$  is a  $C_1$ - $C_{20}$  divalent hydrocarbon group and Z is a primary or tertiary amino group-containing group or an ammonium group-containing group, where "a" is 2 or greater, "b" is 1 or greater, "c" is 4 or greater, "d" is 2 or greater, "Y" is a divalent organic group bound via a carbon-silicon atom to the adjacent silicon atom via an oxygen atom to the polyoxyalkylene block chain. Claim 11 recites that the ratio of the siloxane block (A) is 25-97% by weight of the whole block copolymer. Claim 13, in accordance with the elected species, recites stearyl alcohol.

Kondo teaches surface modifier compositions for use in cosmetic compositions such as hair care products (Example 3). Comparative Example 6 is a composition comprising an aminomodified polysiloxane mixed with the cationic surfactant stearyltrimethylammonium chloride and cetyl alcohol. Stearyl alcohol is taught as a functionally equivalent aliphatic alcohol stabilizing compounds (col. 5, lines 29-33).

Kondo does not expressly teach the amino-modified polysiloxane as instantly claimed in claims 3, 9 and 11.

Ando et al. expressly teach the limitations of claims 3 and 9, wherein a hair cosmetic ingredient is characterized by the inclusion of a reactive silicone-type block copolymer expressed by the following general formula:

$$\begin{bmatrix}
R^{1} & R^{2} & R^{1} \\
 & | & | & | \\
 Y & (S i 0) a & (S i 0) b & S i Y 0 & (C_{n} H_{2n} 0) c
\end{bmatrix}$$
[Chemical 1]:
$$\begin{bmatrix}
R^{1} & R^{2} & R^{1} \\
 & | & | & | \\
 & R^{1} & X & R^{1}
\end{bmatrix}$$

Within the formula, R¹ signifies a monovalent hydrocarbon group (e.g. methyl), whereas "X" signifies a reactive functional group expressed by the following formula: -R³-Z. The variable R³ signifies a direct bond or divalent hydrocarbon group 1-20 carbon atoms in length, whereas "Z" represents a group comprising either an amino or ammonium group. The variable R² represents either R¹ or "X". The variable "n" is an integer having a value of 2-4, "a" is an integer of at least 2, "b" is an integer of at least 1, "c" is an integer of at least 4, "d" is an integer of at least 2, and "Y" represents a divalent organic group coupled, via carbon-silicon, with an adjacent silicon atom and, via an oxygen atom, with a polyoxyalkylene block. The limitations of claim 11 are also taught by Ando in claim 1, such that the siloxane blocks constitute approximately 25-95 wt% of the whole block copolymer. Ando teaches in ¶[0017] that the practiced hair cosmetic ingredient discussed above, maybe further solubilized or dispersed (e.g. combined with) into an alcohol (e.g. cetyl alcohol; see Table IV) or dispersed within water by using a surfactant.

Ando et al. do not expressly teach either of the elected alcohol or cationic surfactant components of the instant invention.

However, it would have been *prime facie* obvious to a person of ordinary skill at the time the invention was made to have incorporated the amino-modified organopolysiloxane component of Ando into the invention practiced by Kondo, particularly since both inventions are directed to the creation of cosmetic compositions, more specifically hair care products. Given that the intended uses of the amino-modified polysiloxanes compositions in both inventions is directed towards the preparation of hair-care products by mixture with alcohol and surfactants, it follows that the ordinarily skilled artisan would have been highly motivated to substitute the aminomodified organopolysiloxane-polyethylene oxide block copolymer (per Ando) for the aminomodified polysiloxane component taught by Kondo. Thus, since the inventions to Kondo and Ando demonstrate inventive overlap, as discussed above, one of ordinary skill in the art would also have been particularly motivated to prepare the instantly claimed hair cosmetic. Thus, it would have been prima facie obvious to combine the teachings, each of which are taught by the art as being useful for the same purpose, in order to form a third composition, such as that which is instantly claimed, to be used for the very same purpose; the idea of combining them flowing logically from their having been individually taught in the prior art (MPEP §2144.06). In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980)

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the reference, especially in the absence of evidence to the contrary.

All claims have been rejected; no claims are allowed.

**CORRESPONDENCE** 

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffrey T. Palenik whose telephone number is (571) 270-1966.

The examiner can normally be reached on 7:30 am - 5:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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/Jeffrey T. Palenik/ Examiner, Art Unit 1615 /MP WOODWARD/ Supervisory Patent Examiner, Art Unit 1615

Supervisory Faterit Examiner, Art Onit 1013